

1. An airbag inflator, comprising:
  - a housing having a first and second end, said housing comprising corrugated material;
  - a first end cap attached to a first end of said housing;
  - a second end cap attached to a second end of said housing;
  - combustible material positioned within the housing, said material capable of generating inflation fluid upon ignition; and
  - an initiator in communication with the combustible material, for initiating a combustible reaction within the housing.
2. The inflator of claim 1, wherein the housing is flexible.
3. The inflator of claim 1, wherein the housing is axially expandable.
4. The inflator of claim 1, wherein the housing, first end cap, and second end cap comprise a pressure vessel.
5. The inflator of claim 1, wherein the housing comprises steel.
6. The inflator of claim 1, wherein the corrugated housing is perforated, thereby allowing inflation fluid to escape the housing at a predetermined rate.

7. The inflator of claim 6, wherein the corrugated housing defines distal peak portions and proximal valley portions, said distal peak portions being perforated.
8. The inflator of claim 6, wherein the corrugated housing defines distal peak portions and proximal valley portions, and wherein the housing is perforated at a point between the distal peak portions and proximal valley portions.
9. The inflator of claim 1, wherein the first and second end caps comprise steel.
10. The inflator of claim 1, wherein the combustible material comprises combustible solid fuel tablets coated with an ignition enhancer.
11. The inflator of claim 1, wherein the combustible material comprises stored inert gas.
12. The inflator of claim 1, wherein the combustible material is substantially enclosed by a membrane, said membrane defining a combustion chamber.
13. The inflator of claim 12, wherein the membrane comprises an environmental seal.
14. The inflator of claim 12, wherein the membrane comprises a metalized film.

15. The inflator of claim 12, wherein the membrane is configured to expand and burst at a predetermined breakout pressure created by the inflation fluid.

16. The inflator of claim 12, wherein the housing is detached from the membrane.

17. The inflator of claim 1, wherein the inflator further comprises a wire covering positioned about the housing, said covering having a first end attached to the first cap and a second end attached to a second cap.

18. The inflator of claim 1, wherein the covering comprises braided steel wires.

19. The inflator of claim 1, wherein the first and second end caps are each secured to the housing by a weld ring.

20. The inflator of claim 1, wherein the first and second end caps are each secured to the housing by a crimped sleeve

21. The inflator of claim 1, wherein the first and second end caps are threaded to engage corresponding threads in the housing.

22. The inflator of claim 1, wherein the initiator comprises a squib.

23. The inflator of claim 22, wherein the squib is integral with one of said first and second end caps.

24. The inflator of claim 17, wherein the housing, first end cap, second end cap, and covering comprises a pressure vessel.

25. An airbag inflator, comprising:

a flexible housing having a first and second end, said housing comprising corrugated metal, the corrugated housing being perforated with exit ports, thereby allowing inflation fluid within the housing to escape from the housing at a predetermined rate;

a first end cap attached to a first end of said housing;

a second end cap attached to a second end of said housing;

a membrane positioned within the housing, said membrane defining a combustion chamber;

combustible material positioned within the membrane, said material capable of generating inflation fluid upon ignition;

a covering positioned about the housing, said covering having a first end attached to the first cap and a second end attached to a second cap and

an initiator in communication with the combustible material, for initiating a combustible reaction within the housing.

26. The inflator of claim 25, wherein the covering comprises braided steel wire.

27. The inflator of claim 26, wherein the corrugated housing defines distal peak portions and proximal valley portions, said housing being perforated adjacent the distal peak portions.

28. The inflator of claim 26, wherein the corrugated housing defines distal peak portions and proximal valley portions, and wherein the housing is perforated at a point between the distal peak portions and proximal valley portions.

29. The inflator of claim 25, wherein the membrane comprises an environmental seal.

30. The inflator of claim 29, wherein the membrane is configured to expand and burst at a predetermined breakout pressure created by the inflation fluid.

31. The inflator of claim 30, wherein the housing is detached from the membrane.

32. The inflator of claim 25, wherein the housing, first end cap, second end cap and covering comprise a pressure vessel.

33. The inflator of claim 25, wherein the housing comprises steel.

34. The inflator of claim 25, wherein the first and second end caps comprise steel.

35. The inflator of claim 25, wherein the combustible material comprises combustible solid fuel tablets coated with an ignition enhancer.

36. The inflator of claim 25, wherein the combustible material comprises stored inert gas.

37. The inflator of claim 25, wherein the membrane comprises mylar.

38. The inflator of claim 25, wherein the first and second end caps are each secured to the housing by a weld ring.

39. The inflator of claim 25, wherein the first and second end caps are each secured to the housing by a crimped sleeve.

40. The inflator of claim 25, wherein the first and second end caps are threaded to engage corresponding threads in the housing.

41. The inflator of claim 25, wherein the initiator comprises a squib.

42. The inflator of claim 41, wherein the squib is integral with one of said first and second end caps.

43. An airbag inflator, comprising:

a flexible housing having a first and second end, said housing comprising corrugated steel and defining distal peak portions and proximal valley portions, the distal peak portions being perforated with exit ports, thereby allowing inflation fluid to escape from the housing at a predetermined rate;

a first end cap attached to a first end of said housing;

a second end cap attached to a second end of said housing, the housing, first end cap, and second end cap forming a pressure vessel;

a membrane positioned within, and detached from, the housing, said membrane defining a combustion chamber;

combustible material positioned within the membrane, said material capable of generating inflation fluid upon ignition;

a wire mesh covering positioned about the housing, said covering having a first end attached to the first cap and a second end attached to a second cap and

an initiator in communication with the combustible material, for initiating a combustible reaction within the housing.